



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,872	12/16/2003	Michael Clark Campbell	2002-0643.01	4772
21972 7590 10/31/2007 LEXMARK INTERNATIONAL, INC. INTELLECTUAL PROPERTY LAW DEPARTMENT 740 WEST NEW CIRCLE ROAD BLDG. 082-1 LEXINGTON, KY 40550-0999			EXAMINER KIM, CHONG R	
			ART UNIT 2624	PAPER NUMBER
			MAIL DATE 10/31/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/736,872

Applicant(s)

CAMPBELL, MICHAEL CLARK

Examiner

Charles Kim

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 and 44-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-16 is/are allowed.
- 6) ☒ Claim(s) 17-42 and 44-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment and Arguments

1. Applicant's amendment filed on August 17, 2007 has been entered and made of record.
2. Applicant's arguments with respect to claims 17, 48, and its dependent claims have been considered but are moot in view of the new ground(s) of rejection.
3. Applicant's arguments have been fully considered, but they are not deemed to be persuasive for at least the following reasons.

Applicant argues (page 18) that their claimed invention (claims 30, 31) differs from the prior art because "Kato, Iguchi, Yamada and Miyake, taken alone or in combination, do not disclose, teach, or suggest wherein the scanner is an alignment sensor used for aligning a printhead of the imaging apparatus." The Examiner disagrees. As explained in the previous Office action dated May 17, 2007, the cited prior art disclose an alignment sensor used for aligning a printhead of the imaging apparatus. In particular, Miyake discloses a scanning sensor (5) that is aligned to print head (6) (col. 3, ll. 3-33 and figure 2). Because it is aligned to the print head, Miyake's sensor is construed as an alignment sensor. Note that this construction is consistent with Applicant's illustration of alignment sensor in figure 1. Accordingly, Miyake clearly teaches/suggests an alignment sensor used for aligning a printhead of the imaging apparatus, as recited in claim 30.

In response to Applicant's argument (page 19) that the prior art does not teach how an alignment sensor may be used for detecting a designation mark, the Examiner would like to point out that the image sensor of Miyake is capable of sensing the contents of a document that is fed

in to the device (see figure 2). Therefore, if the document contains a designation mark, the sensor will obviously sense it.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 17 – 23, 26, 28, 30, 48 and 50 – 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kato (6,141,111), Iguchi (6,473,153), and Nakanishi, U.S. (7,031,005).

In regards to claim 17 Kato discloses, A method for selecting images from a plurality of images obtained from a digital device for printing with an imaging apparatus, said imaging apparatus having a scanner and accessing a memory storing said plurality of images, said method comprising the steps of: printing a thumbnail printout, said thumbnail printout including a plurality of thumbnails corresponding to said plurality of images (Figure 4, item 102; col. 5, lines 25 – 38); generating a selection sheet from said thumbnail printout by placing a first designation mark [directly] on said thumbnail printout for each thumbnail of said plurality of thumbnails corresponding to each image of said plurality of images on which a first action is to be taken (Figure 4; col. 5, lines 30 – 47); detecting said first designation mark by scanning said selection sheet with said scanner (col. 6, lines 27 – 38); and performing said first action based on said detecting said first designation mark (col. 5, line 62 – col. 6, line 5).

Kato does not teach placing a mark directly on the thumbnail; however, this concept is well known as shown by Iguchi (col. 22, lines 47 – 67; figure 15). Iguchi has the user trim an

Art Unit: 2624

image by directly marking on it, the patent also teaches of placing written messages directly on the images as well as selecting faces by marking directly on the thumbnails.

Examiner notes it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Kato to allow a user to directly mark a thumbnail as taught by Iguchi. Allowing a user direct marking would make it easier for the user to see and understand the operation they are requesting and ensure they realize the operation would be performed on the overwritten thumbnail.

Neither Kato nor Igushi disclose the step of providing a confirmation for confirming to a user each image on which the first action to be taken is designated. However, this feature was exceedingly well known in the art. For example, Nakanishi allows a user to select images on which an action (printing) is taken [figure 2]. Nakanishi explains that the selected image is displayed to provide a confirmation for confirming to a user the selected image on which the action is to be taken is designated [col. 3, ll. 60-col. 4, ll. 8].

Kato, Igushi, and Nakanishi are combinable because they are all concerned with image processing methods. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Kato and Igushi to include the teachings of Nakanishi. The reason for doing so would have been to enhance the accuracy of the image selection process by providing the user with a confirmation of the selected images. In addition, this would provide the user with the opportunity to correct any inadvertent selections and allow him/her to re-select the desired images for processing. Therefore, it would have been obvious to combine Kato and Igushi with Nakanishi to obtain the invention as specified in claim 17.

In regards to claim 18 Kato discloses, The method of claim 17, wherein said first designation mark is an alpha-numeric symbol (Figure 4; Figure 8; col. 5, lines 39 – 47).

In regards to claim 19 Kato discloses, The method of claim 17, wherein the step of performing said first action is based on a known location of said each thumbnail corresponding to said each image on which said first action is to be taken (col. 6, lines 26 – 33).

In regards to claim 20 Kato discloses, The method of claim 17, said thumbnail printout further including a print option symbol, further comprising the step of: placing an option designation mark directly on said print option symbol on said selection sheet to designate a print option, wherein the detecting step includes detecting said option designation mark (Figure 4: 103 is a print option symbol.); and wherein the step of performing said first action includes printing said each image on which said first action is to be taken using said print option based on a known location of said print option symbol (col. 6, lines 26 – 54).

In regards to claim 21 Kato discloses, The method of claim 20, wherein said print option symbol is one of a plurality of print option symbols, said option designation mark is one of a plurality of option designation marks, and said print option is one of a plurality of print options (Figure 4 shows several print options symbols, the designation mark can be a check mark or a number in figure 4.).

In regards to claim 22 Kato discloses, The method of claim 21, wherein each image of said plurality of images on which said first action is to be taken includes a first image on which said first action is to be taken and a second image on which said first action is to be taken, said step of said performing said first action including printing said first image using at least one print

Art Unit: 2624

option of said plurality of print options and printing said second image using a different at least one print option of said plurality of print options (Figure 4).

In regards to claim 23 Kato discloses, The method of claim 17, wherein the step of performing said first action includes printing (col. 5, line 62 – col. 6, line 5).

In regards to claim 26 Kato discloses, The method of claim 17, wherein: the step of generating said selection sheet further includes placing a second designation mark directly on said thumbnail printout for each thumbnail of said plurality of thumbnails corresponding to each image of said plurality of images on which a second action is to be taken, said second designation mark being different from said first designation mark, and said second action being different from said first action (Figure 4, Figure 6, Figure 8); the step of detecting includes detecting both said first designation mark and said second designation mark by scanning said selection sheet with said scanner (col. 6, lines 26 – 33); and the step of performing includes performing both said first action and said second action based on said detecting both said first designation mark and said second designation mark respectively (col. 6, lines 34 – 53).

In regards to claim 28 Kato discloses, The method of claim 26, wherein said first designation mark has a first configuration, and said second designation mark has a second configuration different from said first configuration, wherein: said detecting both said first designation mark and said second designation mark includes detecting said first configuration and said second configuration respectively (col. 6, lines 26 – 33); and said performing both said first action and said second action is based on said detecting said first configuration and said second configuration respectively (col. 6, lines 26 – 53).

In regards to claim 48, claim 48 is rejected for the same reasons as claim 26. The argument analogous to that presented above for claim 26 is applicable to claim 48.

In regards to claim 50, claim 50 is rejected for the same reasons as claim 28. The argument analogous to that presented above for claim 28 is applicable to claim 50.

In regards to claim 51 Kato discloses, The method of claim 48, said thumbnail printout further including a print option symbol, further comprising the steps of: placing an option designation mark at said print option symbol on said selection sheet to designate a print option (col. 5, lines 25 – 47); and detecting said option designation mark by scanning said selection sheet with said scanner, wherein the step of performing said first action includes printing each said image on which said first action is to be taken using said print option (col. 6, lines 26 – 54).

In regards to claim 52 Kato discloses, The method of claim 51, wherein: said print option symbol is one of a plurality of print option symbols (Figure 4); said print option is one of a plurality of print options (Figure 4); and said option designation mark is one of a plurality of option designation marks, wherein each image of said plurality of images on which said first action is to be taken includes a first image on which said first action is to be taken and a second image on which said first action is to be taken (col. 5, lines 25 – 47); and the step of performing said first action includes printing said first image using at least one print option of said plurality of print options and printing said second image using a different at least one print option of said plurality of print options (col. 6, lines 26 – 54).

5. Claims 24, 25, 27, 29, 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kato, Iguchi, Nakanishi, and Lumley (7,009,726).

In regards to claim 25, the combination of Kato, Iguchi, and Nakanishi disclose many different types of actions that can be taken based on user selection on the selection sheet; however, the combination does not disclose deletion as one of those options. Lumley teaches (Figure 1, item 41; col. 2, lines 4 – 9) that a selection sheet for photos can be created that includes the option of deleting an image from the digital media.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to include a delete option, as taught by Lumley, in the selection sheet disclosed by the combination of Kato, Iguchi, and Nakanishi. Allowing the user to delete images directly from the selection sheet will save the user time, as the selection sheet is possibly the first time the user has seen the image, it is the first time he or she would realize they don't want to keep the image. As the idea behind both of these patents is to allow the user to work with digital media without the need of a computer including other operations the user could perform on a computer makes the combination more fully featured.

In regards to claim 24, claim 24 is rejected for the same reasons as claim 25, deleting an image would be the same as inhibiting printing.

In regards to claim 27, claim 27 is rejected for the same reasons as claim 25. The argument analogous to that presented above for claim 25 is applicable to claim 27.

In regards to claim 29, claim 29 is rejected for the same reasons as claim 25. The argument analogous to that presented above for claim 25 is applicable to claim 29.

In regards to claim 49, claim 49 is rejected for the same reasons as claim 25. The argument analogous to that presented above for claim 25 is applicable to claim 49.

Art Unit: 2624

6. Claims 30 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kato, Iguchi, Nakanishi, Yamada (6,089,766) and Miyake (4,905,090).

In regards to claim 30, the combination of Kato, Iguchi, and Nakanishi does not teach an alignment sensor that is used as a scanner. Yamada teaches (col. 9, line 57 – col. 10, line 61) that an alignment sensor can be used to scan in an image pattern. Yamada uses this alignment sensor only for the purpose of alignment, but the scanner clearly has the capability to scan in other items. However, it is a well-known concept to use a combination printhead/scanner head as shown by Miyake (col. 3, lines 3 – 12). The printhead/scanner disclosed by Miyake is not described as an alignment sensor. In combination Yamada and Miyake teach the concept of an alignment sensor that can be used as a scanner. Using an alignment sensor as a scanner would allow for added features without adding any new hardware to Yamada.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to use an alignment sensor, which acts as scanner (as taught by the combination of Yamada and Miyake) to the invention disclosed by Kato, Iguchi, and Nakanishi. Adding an alignment sensor to the combination would ensure more accurate printing, and using it as a scanner would allow for less hardware and a cheaper implementation.

In regards to claim 53, claim 53 is rejected for the same reasons as claim 30. The argument analogous to that presented above for claim 30 is applicable to claim 53.

7. Claims 31 – 40, 44, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kato and Yoshihara (6,031,632), Yamada and Miyake.

In regards to claim 31, Kato as shown in the rejection of claim 30 discloses everything called for in this claim except for orientation marks. Using orientation marks with scanning is well known as shown by Yoshihara (Figure 7, items 1105 – 1108, col. 10, lines 28 – 33).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to use the orientation marks taught by Yoshihara on the selection sheet disclosed by Kato. Using orientation marks will ensure a more robust scan and lead to less error, and therefore fewer reprint operations.

In regards to claim 32 Kato discloses, The method of claim 31, wherein said at least one orientation symbol includes at least one elongate bar (Figure 7).

In regards to claim 33 Kato discloses, The method of claim 32, wherein said at least one elongate bar is printed in at least one corner of said thumbnail printout (Figure 7).

In regards to claim 34 Kato discloses, The method of claim 33, wherein said at least one orientation symbol is configured to indicate at least four possible orientations of said thumbnail printout (Figure 7).

In regards to claim 35 Kato discloses, The method of claim 34, wherein said at least one orientation symbol is at least four orientation symbols (Figure 7).

In regards to claim 36 Kato discloses, The method of claim 35, wherein a first orientation symbol is an elongate bar, a second orientation symbol is two elongate bars, a third orientation symbol is three elongate bars, and a fourth orientation symbol is four elongate bars (Yoshihara discloses 6 orientation marks in figure 7, it would have been obvious to one of ordinary skill in the art at the time of the invention to use any number of orientation marks. As long as the marks don't get so numerous they start to take away a significant portion of the selection page, more

orientation marks will only increase accuracy, leading to fewer misreads and thus fewer times incorrect print jobs, or worse yet inappropriate deletions.).

In regards to claim 37 Kato discloses, The method of claim 36, wherein said orientation is determined based on detecting a number of elongate bars (Figure 7).

In regards to claim 38 Kato discloses, The method of claim 31, wherein the step of performing said first action is based on a known location of said at least one thumbnail based on the step of determining said orientation (This is the basic idea of using orientation marks.).

In regards to claim 39, claim 39 is rejected for the same reasons as claim 20. The argument analogous to that presented above for claim 20 is applicable to claim 39.

In regards to claim 40, claim 40 is rejected for the same reasons as claim 23. The argument analogous to that presented above for claim 23 is applicable to claim 40.

In regards to claim 44, claim 44 is rejected for the same reasons as claim 26. The argument analogous to that presented above for claim 26 is applicable to claim 44.

In regards to claim 46, claim 46 is rejected for the same reasons as claim 28. The argument analogous to that presented above for claim 28 is applicable to claim 46.

8. Claims 41, 42, 45, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kato, Yoshihara, Yamada and Miyake as applied to claim 31 above, and further in view of Lumley.

In regards to claim 41, claim 41 is rejected for the same reasons as claim 24. The argument analogous to that presented above for claim 24 is applicable to claim 41.

In regards to claim 42, claim 42 is rejected for the same reasons as claim 25. The argument analogous to that presented above for claim 25 is applicable to claim 42.

In regards to claim 45, claim 45 is rejected for the same reasons as claim 42. The argument analogous to that presented above for claim 42 is applicable to claim 45.

In regards to claim 47, claim 47 is rejected for the same reasons as claim 42. The argument analogous to that presented above for claim 42 is applicable to claim 47.

Allowable Subject Matter

9. Claims 1 – 16 are allowed.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Kim whose telephone number is 571-272-7421. The examiner can normally be reached on Mon thru Thurs 8:30am to 6pm and alternating Fri 9:30am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 571-272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Charles Kim
Patent Examiner
Art Unit 2624
chongr.kim@uspto.gov

October 24, 2007



BHAVESH M MEHTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600